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T.O. 3

Test Specification for CU-10 Receiver

ORIGINAL CL BY 235979

☐ DECL ☒ REVW ON 2010
 EXT BYND 6 YRS BY SAME
 REASON 3d(3) 25X1
1. Triggering Sensitivity

1.1 Connect test equipment as in Fig. #1

Turn on power and allow for warm-up time.

1.1.1 Set audio generator HP 200c to 150 cps and maximum amplitude.

Set signal generator HP 608D to about 10 Mc, EXT. MOD., OUTPUT LEVEL to SET LEVEL, MOD. LEVEL to 100% MODULATION, ATTENUATOR to about -90 dbm.

Set receiver Hammerlund Sp 600 or Collins 51J SELECTIVITY 3 Kc IF bandwidth, RF GAIN between 9-10, frequency to 10 Mc, AVC-ON, BFO-OFF, LIMITER-OUT.

Trim ANT. TRIM and adjust PHASING for maximum output. NOTE: To set Receiver observe on oscilloscope the detected receiver output at the detector output in the CU-10 receiver (junction of CR1, R2, C2, and C3)

1.2 If CU-10 receiver is properly aligned (See Operating Instructions Section III of Handbook) and test equipment set according to above paragraph 1.1 the indicating light II on the CU-10 receiver should be on.

1.2.1 To measure triggering sensitivity increase slowly the attenuation on signal generator HP 608D, until the indicating light II on CU-10 receiver is off.

1.2.2 Now decrease the attenuation 3 db from the point indicating light went off. After 3 seconds the indicating light should go on.

1.2.3 The reading on the attenuator dial plus the 10 db pad attenuation is the triggering sensitivity of the CU-10 receiver.

The sensitivity is normally -120 dbm, or better

Specification 2 -115 dbm2. Preamble Band Width

2.1 Repeat 1.1 and 1.2.1

2.2 Tune slowly audio generator HP 200c above and below 150 cps until the indicating light on CU-10 receiver goes off.

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- 2.2.1 The difference between the two extreme frequencies is the preamble band-width should be 20 cps
Specification < 30 cps
- 3 Integrating Time and Discharge Time
 - 3.1 Repeat 1.1 to 1.2.1
 - 3.2 Remove input to CU-10 receiver by disconnecting J1
 - 3.2.1 Reconnect J1 and observe time elapsed between connecting J1 and the time the indicating light turns on.. This time should be 3 seconds.
Specification > 2.5 Seconds
 - 3.3 Also observe time elapsed between disconnecting J1 and the time the indicating light goes off. This is the discharge time of the CU-10 receiver and should be less than .5 seconds.
Specification $< .6$ seconds.

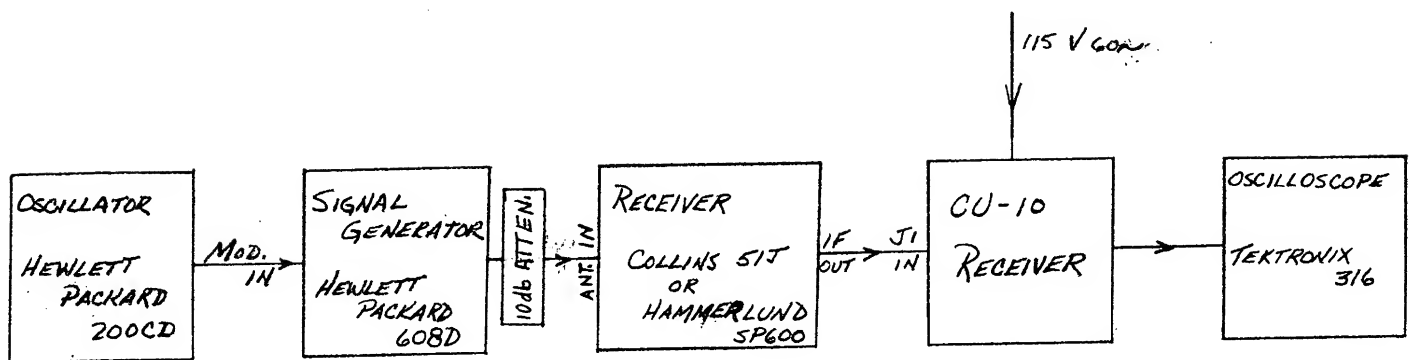
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CONFIDENTIALTEST EQUIPMENT

<u>Name</u>	<u>Designation</u>	<u>Use</u>
Signal Generator	Hewlett-Packard 608D or equivalent	CW input signal source
Audio Generator	Hewlett-Packard 200C	CW modulating source
Receiver	Hammerlund SP 600 or Collins 51J	Receive modulated CW signal
Oscilloscope	Teletronix 310 or equivalent	Alignment presentation
10 db Pad	Applied Research 10 db 50 ohms Pad	To extend the HP 608D attenuator range

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FIGURE 1